SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information
Product Name: Synfluid® PAO 2 cSt
Material: 1111737, 1111736, 1111732, 1082190, 1079695, 1079661, 1079651, 1079671

Use: Synthetic Lubricants
Company: Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:
Health:
866.442.9628 (North America)
1.832.813.4984 (International)
Transport:
CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

Responsible Department: Product Safety and Toxicology Group
E-mail address: SDS@CPChem.com
Website: www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture
GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)

Emergency Overview

Danger
Physical state: Liquid
Color: Clear, Colorless
Odor: Odorless
Hazards: Harmful if inhaled. May be fatal if swallowed and enters airways.
**Classification**

: Acute toxicity, Category 4, Inhalation
   Aspiration hazard, Category 1

**Labeling**

Symbol(s) : 

Signal Word : Danger

Hazard Statements : H304: May be fatal if swallowed and enters airways.
   H332: Harmful if inhaled.

Precautionary Statements : Prevention:
   P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
   P271: Use only outdoors or in a well-ventilated area.

Response:
   P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
   P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
   P331: Do NOT induce vomiting.

Storage:
   P405: Store locked up.

Disposal:
   P501: Dispose of contents/ container to an approved waste disposal plant.

**SECTION 3: Composition/information on ingredients**

Synonyms : 1-Decene, Dimer, Hydrogenated
   Synfluid PAO 2 CST
   PAO 2 MIL
   Polyalphaolefin
   PAO

Molecular formula : UVCB

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No. / EINECS-No.</th>
<th>Concentration [wt%]</th>
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<td>1-Decene, Dimer, Hydrogenated</td>
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</table>

**SECTION 4: First aid measures**

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim.
unattended. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Move to fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water. If on clothes, remove clothes. If skin irritation persists, call a physician.

In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do NOT induce vomiting. If symptoms persist, call a physician.

SECTION 5: Firefighting measures

Flash point : 160 °C (320 °F)
Method: Cleveland Open Cup

Autoignition temperature : 324 °C (615 °F)

Unsuitable extinguishing media : High volume water jet.

Specific hazards during fire fighting : Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Fire and explosion protection : Normal measures for preventive fire protection.

Hazardous decomposition products : Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.
SECTION 7: Handling and storage

Handling

Advice on safe handling: Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Use: Synthetic Lubricants

SECTION 8: Exposure controls/personal protection

Engineering measures

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Dusts and Mists / P100. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Safety glasses. Eye wash bottle with pure water.
Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate: Protective suit. Safety shoes.

Hygiene measures: General industrial hygiene practice.

Protective measures: Wear suitable protective equipment. When using do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance
Physical state: Liquid
Color: Clear, Colorless
Odor: Odorless

Safety data
Flash point: 160 °C (320 °F)
Method: Cleveland Open Cup
Lower explosion limit: Not applicable
Upper explosion limit: Not applicable
Oxidizing properties: no
Autoignition temperature: 324 °C (615 °F)
Molecular formula: UVCB
Molecular weight: Varies
pH: Not applicable
Freezing point: -73 °C (-99 °F)
Boiling point/boiling range: 223 °C (433 °F)
Vapor pressure: 1.00 MMHG
at 75 °C (167 °F)
Relative density: 0.8
at 15.6 °C (60.1 °F)
Density: 795.7 g/l
Water solubility: Soluble in hydrocarbon solvents; insoluble in water.
Partition coefficient: n-octanol/water: No data available
Relative vapor density: 9
(Air = 1.0)
Evaporation rate: No data available
### SECTION 10: Stability and reactivity

**Reactivity**
- Stable at normal ambient temperature and pressure.

**Chemical stability**
- This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

**Hazardous reactions**
- Hazardous reactions: Hazardous polymerization does not occur.
  - Further information: No decomposition if stored and applied as directed.
  - Hazardous reactions: Reacts violently with water.

**Conditions to avoid**
- No data available.

**Materials to avoid**
- May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous decomposition products**
- Carbon oxides

**Other data**
- No decomposition if stored and applied as directed.

### SECTION 11: Toxicological information

**Synfluid® PAO 2 cSt**

**Acute oral toxicity**
- LD50: >5000 mg/kg
  - Species: Rat
  - Sex: male and female

**Acute inhalation toxicity**
- LC50: 1.17 mg/l
  - Exposure time: 4 h
  - Species: Rat
  - Test atmosphere: dust/mist

**Acute dermal toxicity**
- LD50: > 3 g/kg
  - Species: Rabbit
  - Sex: Not Specified

**Skin irritation**
- No skin irritation
Synfluid® PAO 2 cSt

SECTION 1: Identification

**Product name:** Synfluid® PAO 2 cSt

**Version:** 1.9

**Revision date:** 2019-10-15

**SDS number:** 100000010948

**Eye irritation:** No eye irritation

**Sensitization:** Did not cause sensitization on laboratory animals.

**Aspiration toxicity:** May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

**CMR effects**

1- Decene, Dimer, Hydrogenated: Carcinogenic: Not classifiable as a human carcinogen. Mutagenicity: Contains no ingredient listed as a mutagen. Teratogenicity: No toxicity to reproduction. Reproductive toxicity: No toxicity to reproduction.

SECTION 12: Ecological information

**Ecotoxicity effects**

**Toxicity to fish**

1-Decene, Dimer, Hydrogenated: LL50: > 1,000 mg/l

Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)

Semi-static test

Test substance: yes

The product has low solubility in the test medium. An aqueous dispersion was tested.

**Toxicity to daphnia and other aquatic invertebrates**

1-Decene, Dimer, Hydrogenated: EL50: > 1,000 mg/l

Exposure time: 48 h

Species: Daphnia magna (Water flea)

Static test

Test substance: yes

The product has low solubility in the test medium. An aqueous dispersion was tested.

**Toxicity to algae**

1-Decene, Dimer, Hydrogenated: EL50: > 1,000 mg/l

Exposure time: 72 h

Species: Scenedesmus capricornutum (fresh water algae)

Static test

Test substance: yes

The product has low solubility in the test medium. An aqueous dispersion was tested.

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
1-Decene, Dimer, Hydrogenated

Biodegradability

Elimination information (persistence and degradability)

Mobility

Results of PBT assessment

Additional ecological information

Ecotoxicology Assessment

Short-term (acute) aquatic hazard

Long-term (chronic) aquatic hazard

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product

Contaminated packaging

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous
Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

**US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)**
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**SECTION 15: Regulatory information**

<table>
<thead>
<tr>
<th>Notification status</th>
<th>United States of America (USA)</th>
<th>Canada DSL</th>
<th>Switzerland CH INV</th>
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<th>Australia AICS</th>
<th>New Zealand NZIoC</th>
<th>Japan ENCS</th>
<th>Europe REACH</th>
<th>Switzerland CH INV</th>
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<td>On or in compliance with the active portion of the TSCA inventory</td>
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Notification number: HSR0002606
Korea KE CI : All substances in this product were registered, notified to be registered, or exempted from registration by CPChem through an Only Representative according to K-REACH regulations. Importation of this product is permitted if the Korean Importer of Record was included on CPChem’s notifications or if the Importer of Record themselves notified the substances.

Philippines PICCS : Notification number: KE-09501
China IECSC : On the inventory, or in compliance with the inventory
Taiwan TCSI : On the inventory, or in compliance with the inventory

SECTION 16: Other information

Further information
Legacy SDS Number : 3331

NSF H1, HX-1 Registered, meets USDA 1998 H1 Guidelines
Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
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<tbody>
<tr>
<td>ACGIH - American Conference of Government Industrial Hygienists</td>
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<tr>
<td>LD50 - Lethal Dose 50%</td>
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<td>AICS - Australia, Inventory of Chemical Substances</td>
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<td>LOAEL - Lowest Observed Adverse Effect Level</td>
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<td>DSL - Canada, Domestic Substances List</td>
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<td>NFPA - National Fire Protection Agency</td>
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<td>NDSL - Canada, Non-Domestic Substances List</td>
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<td>NIOSH - National Institute for Occupational Safety &amp; Health</td>
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<td>CNS - Central Nervous System</td>
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<td>NTP - National Toxicology Program</td>
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<tr>
<td>CAS - Chemical Abstract Service</td>
</tr>
<tr>
<td>NZIoC - New Zealand Inventory of Chemicals</td>
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<td>EC50 - Effective Concentration</td>
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<td>NOAEL - No Observable Adverse Effect Level</td>
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<td>EC50 - Effective Concentration 50%</td>
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<td>NOEC - No Observed Effect Concentration</td>
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<td>EGEST - EOSCA Generic Exposure Scenario Tool</td>
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<td>OSHA - Occupational Safety &amp; Health Administration</td>
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<td>EOSCA - European Oilfield Specialty Chemicals Association</td>
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<td>PEL - Permissible Exposure Limit</td>
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<td>EINECS - European Inventory of Existing Chemical Substances</td>
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<td>PICCS - Philippines Inventory of Commercial Chemical Substances</td>
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<td>MAK - Germany Maximum Concentration Values</td>
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<td>PRNT - Presumed Not Toxic</td>
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<td>GHS - Globally Harmonized System</td>
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<td>RCRA - Resource Conservation Recovery Act</td>
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<td>=&gt; - Greater Than or Equal To</td>
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<td>STEL - Short-term Exposure Limit</td>
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<td>IC50 - Inhibition Concentration 50%</td>
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<td>SARA - Superfund Amendments and</td>
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SDS Number:100000010948
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<td>International Agency for Research on Cancer</td>
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